

## **AMENDMENTS TO THE SPECIFICATION**

Please replace Paragraph [0002] with the following paragraph rewritten in amendment format:

**[0002]** This application is a divisional of ~~presently~~  
~~allowed~~ United States Patent Application No. 10/180,446 filed on  
June 26, 2002, now U.S. Patent No. 6,754,566 which issued on  
June 22, 2004. The disclosure of which is incorporated herein by  
reference in its entirety as if fully set forth herein.

Please replace Paragraph [0054] with the following paragraph rewritten in amendment format:

**[0054]** The method 60 may also include[[s]] accessing  
or retrieving engine loads data at step 74 and mass data at step 76.  
The engine loads data may be contained in the Engine Loads Time  
History File (ELTHF) 28. The engine loads data may include the  
engine loads or forces on the structural FEM of the aircraft for the  
available flight maneuver time instances. Accordingly, the user may  
be required to designate the particular time instances for which the  
flight loads balancing process will be performed.

Please replace Paragraph [0057] with the following paragraph rewritten in amendment format:

**[0057]** At step 78 the flight loads on the aircraft are  
balanced and the aircraft is trimmed. That is, the mapped forces  
from step 72, the engine loads [[from]] data from step 74, and the  
weight data from step 76 are balanced and the aircraft is trimmed,  
thereby producing a balanced flight loads data set for the particular  
time instance being analyzed. The TrimDB application 46 may be  
used at least in part by the system 10 when balancing the flight  
loads and trimming the aircraft at step 78. Steps 62 through 78 may  
then be repeated for each of the remaining time instances for which  
the flight loads are to be balanced.